This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (currently amended) A speech encoder, comprising:

   (a) a linear prediction, pitch, and , voicing analyzer;

   (b) a waveform coder coupled to said analyzer, with LP coefficients updated within a sub-frame for excitation synthesis for eliminating switching artifacts.

2. (currently amended) The speech encoder of claim 1, wherein:

   (a) the length of said sub-frame is ~~has a length equal to~~ an integer multiple of a length of an interval of said LP coefficients ~~update~~.

3. (previously added) The speech encoder of claim 2, wherein:

   (a) said sub-frame has a length of 80 samples; and

   (b) said LP coefficient updated interval is 20 samples.

4. (currently amended) A method of speech encoding, comprising the steps of:

   (a) providing waveform excitation sub-frames;

   (b) providing a plurality of sets of LP coefficients, for each of said sub-frames, for a waveform coder coupled to an analyzer; and

   (c) finding waveform excitations for said sub-frames using said sets of LP coefficients.

5. (previously added) The method of claim 4, wherein:

(a) said sub-frames have length 80 samples; and

(b) said sets of LP coefficients apply to intervals of length 20 samples.

6.   (new) A linear predictive speech coding system, comprising:

(a) a classification of frames and a hybrid coder using both waveform coding and parametric coding for different classes of frames;

(b) a phase alignment for a parametric coder aligns synthesized speech frames with adjacent waveform coder synthesized frames;

(c) a zero phase alignment of speech prior to waveform coding aligns synthesized speech frames of a waveform coder with frames synthesized with a parametric coder; and

(d) an inter-frame interpolation of LP coefficients suppresses artifacts in resultant synthesized speech frames.